II-VI News

ZnTe pn junctions for pure green LEDs

Japan Energy has succeeded in growing high-quality, 80 mm diameter ZnTe single crystals with low defect densities (several thousands/cm^2). JE has also formed the first intrinsic pn junctions in ZnTe, enabling fabrication of pure green LEDs. Intensity is comparable to commercial GaP yellow-green LEDs, but emission efficiency is much higher and reproducible. Also, the simple thermal treatment process (used in silicon devices) is lower cost than epi growth for conventional colour LEDs.

JE will start to supply the ZnTe to LED makers for evaluation and, depending on demand, decide on industrial production within a year.

Japan Energy (UK) Ltd
Tel: +44-20-7588-9442
Fax: +44-20-7588-9443

CdZnTe radiation detectors for NASA

NASA has awarded the eV Products division of II-VI Inc (Saxonburg, PA, USA) a $700,000 contract to manufacture 22,000 CdZnTe radiation detectors for the SWIFT research satellite, plus possibly a further 18,000 and 5,000 following completion of the initial contract.

* II-VI's fiscal Q3/2000 saw record sales of US$19.78m (up 27% on fiscal Q3/99) and the third consecutive quarter of record bookings (US$23.47m, up 60% - up 300% for eV), including nearly US$2m of R&D contracts aimed at expanding applications for eV's CdZnTe detectors and improving its SiC crystal growth (US$450,000).

II-VI Inc
Tel: +1-724-352-4455

Briefs...Briefs...

RAITH has celebrated its 20th anniversary. RAITH supplies ultra-high-resolution electron beam lithography systems and metrology tools plus ESCOSY Plus CAD Navigation Software for failure analysis and device engineering labs.

According to **Strategies Unlimited** (Mountain View, CA, USA), the world market for telecoms lasers is forecast to grow 50% from US$1.95bn in 1999 to US$2.92bn in 2000, and at a compound annual growth rate of over 22% to US$5.35bn in 2004.

Solar-cell News

Spectrolab solar cells for Dornier

Under a technical assistance agreement, Spectrolab Inc (Sylmar, CA, USA) is to supply GaAs solar cells to DaimlerChrysler Aerospace's Dornier Satellitensysteme GmbH (DSS) of Germany for qualification testing in its space solar array systems. This is Spectrolab's first European agreement since receiving US government approval to provide solar cells, panels and arrays to European spacecraft manufacturers.

DSS will procure several hundred thousand multi-junction solar cells through 2002, with proprietary agreements allowing direct insertion into existing designs. Spectrolab claims that - once qualified - its cells (with an average efficiency of 24.5%) can improve DSS' solar array power performance by 40% compared to earlier silicon designs, supporting spacecraft designs needing 20 kW or more (DSS is positioned to join the anticipated Astrium Company with Matra Marconi Systems this year). Such cells have already been delivered for three US flight programs (the first is due to launch late Summer).

Spectrolab Inc
Tel: +1-310/364-5777

Solar-cell News

Emcore to expand opto and solar plant

Emcore plans by December to significantly expand its Sandia Technology Park site in Albuquerque, NM, USA (involving purchasing an additional 2 acres west of the site) into a campus that will house an integrated, centralised manufacturing site for its solar cell, optical components and networking products.

In addition to the existing 50,000 ft^2 facility (completed in October '98, and 50% occupied by the PhotoVoltaic division for making dual- and triple-junction solar cells for satellites), plans include completion of the remaining unoccupied portion and the construction of a new 36,000 ft^2 two-storey building. This will triple manufacturing capacity for the PV and MODE (MicroOptical Device) divisions.

EMCORE Corp
Tel: +1-732-271-9090
Fax: +1-732-271-9686